

REMARKS

Below, the applicant's comments are preceded by related remarks of the examiner set forth in small bold type.

Claims 1-11, 13, 17-21, 25-26, 29-30, 33-34, and 36-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hauser et al. (USPN 5,889,956) (cited as pertinent prior art in previous Office Action) (hereinafter Hauser) in view of Nicola et al. ("Fast Simulation of the Leaky Bucket Algorithm" Proceedings of the 1994 Winter simulation Conferences Society for Computer Simulation International (c) 1994) (hereinafter Nicola).

2. Referring to independent claims 1, 10, 17, and 18, (e.g. exemplary claim 1), Hauser discloses a method comprising:

representing, by a current resource usage value (i.e. actual use), a total amount of a resource that is managed by a software tool and is currently in use by both a first process and a second process (col. 5, lines 30-35; col. 8, lines 40-62);

for each of the first and second processes, specifying a maximum current usage level that is associated with the process (i.e. maximum allowed for the Programming Department and a second maximum allowed value for the Hardware Department) (Figure 1, ref. 22, 24; Figure 3, ref. 306, 308);

in response to a request by one of the processes for additional use of the resource, allowing the process to make the requested additional use and increasing the current usage value by the amount of requested additional use, provided that the requested additional use plus the current usage would not exceed the maximum current usage level (i.e. Max_allowed) associated with the requesting process (Figure 3, ref. 302-312; col. 8, line 62 to col. 9, line 48).

Hauser does not disclose that the total resource usage is decreased using a preset amount per unit of time. However it is well known and expected in the art that a system has the ability to have a resource usage decreased using a preset amount per unit of time. In support of this statement Nicola discloses a leaky bucket algorithm wherein tokens are generated at a fixed interval (i.e. preset amount per unit of time) (p. 266, col. 2, ¶ 1). It would be obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Nicola with Hauser to effectively police a QoS algorithm thereby increasing the fairness of the system and allowing starved processes access to the resource as supported by Nicola p. 266, col. 2, ¶ 1).

...

25. Applicant's arguments dated April 4, 2005 have been fully considered but are not persuasive.

26. In the remarks, Applicant argues, in substance, that (1) the Office mischaracterizes the term "actual use" and the Examiner failed to take into account that the higher level entity can use the resource.

27. As to point (1) the Office is clarifying its position, with relation to the claimed invention, the "First process" can be considered equivalent to the Programming Department and the "first maximum value would be equivalent to the maximum_allowed for the Programming department. The same also goes for the Hardware department, it also has its own maximum_allowed value. Therefore this reasoning does not need to take into

account the maximum_allowed of the Engineering department. The Applicant is taking one specific example and attempting to apply it to the entire system, however the reasoning shown above clearly shows Applicant is misconstruing the application of the reference. By this rationale, the rejection is maintained.

In the Reply to Office Action filed on March 31, 2005, the applicant made two arguments as to why the claims are patentable. The examiner only addressed the first argument and did not address the second argument. Thus, the applicant is presenting the second argument in more detail below.

The examiner interprets the “first process,” “first maximum value,” and “second process” of claim 1 to correspond to the programming department, the maximum_allowed for the programming department, and the hardware department, respectively, of Hauser. The applicant contends that, under the examiner’s interpretation, Hauser does not disclose “associating with the first process a first maximum value of the aggregate current usage value;” in which the “aggregate current usage value” represents “a total amount of a resource that is ... theoretically currently in use in the aggregate by a first process and a second process,” (emphasis added) as recited in claim 1.

According to the examiner’s interpretation, the “first maximum value” of claim 1 corresponds to the maximum_allowed for the programming department. Thus, Hauser does not disclose a “first maximum value” that represents a maximum value of a total amount of resource that is theoretically currently in use in the aggregate by the programming department and the hardware department.

For example, in claim 1, if the “resource” is bandwidth, then a first process may be associated with a first maximum value of the aggregate current usage value, such as 30 MBPS, and a second process may be associated with a second maximum value of the aggregate current usage value, such as 40 MBPS. In claim 1, if the first process requests additional use of the bandwidth, the first process is allowed to make the requested additional use provided that the total amount of bandwidth that is theoretically currently in use in the aggregate by the first and second processes would not exceed 30 MBPS. If

the second process requests additional use of the bandwidth, the second process is allowed to make the requested additional use provided that the total amount of bandwidth that is theoretically currently in use in the aggregate by the first and second processes would not exceed 40 MBPS.

Hauser discloses a maximum_allowed associated with the engineering department, which represents a maximum amount of bandwidth that the programming department and the hardware department can use (assuming that the engineering department itself does not use bandwidth). However, in Hauser, the maximum_allowed variable that represents a maximum amount of bandwidth that the programming department and the hardware department can use is associated with the engineering department, not with the programming department or the hardware department.

For example, Hauser discloses assigning a maximum of 70 MBPS of bandwidth to the engineering department, and assigning a maximum of 30 MBPS of bandwidth to the hardware department. (col. 4, lines 6-9) The total usage of bandwidth by the hardware department cannot exceed 30 MBPS, and the total usage of bandwidth by the hardware department and the programming department (which both belongs to the engineering department) cannot exceed 70 MBPS. Hauser does not disclose a maximum_allowed variable associated with the hardware department that represents the maximum amount of bandwidth can be used in the aggregate by the hardware department and the programming department. Nor does Hauser disclose a maximum_allowed variable associated with the programming department that represents the maximum amount of bandwidth can be used in the aggregate by the hardware department and the programming department.

Claims 10, 17, and 18 are patentable for at least similar reasons as claim 1.

The dependent claims are patentable for at least the same reasons as the claims on which they depend.

Any circumstance in which the applicant has addressed certain comments of the examiner does not mean that the applicant concedes other comments of the examiner. Any circumstance in

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which the applicant has made arguments for the patentability of some claims does not mean that there are not other good reasons for patentability of those claims and other claims. Any circumstance in which the applicant has amended a claim does not mean that the applicant concedes any of the examiner's positions with respect to that claim or other claims.

Enclosed is a \$1,020 check for the Petition for Extension of Time fee and a check of \$790 for the Request for Continued Examination fee. Please apply any other charges or credits to deposit account 06-1050, reference 10559-233001.

Respectfully submitted,

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